

REMARKS

By this Office Action, the Examiner has required restriction to one of the following inventions:

I. Claims 20-26, drawn to ONE isolated nucleic acid, a vector thereof, and cultured cell, classified in class 536, subclass 23.1; class 435, subclasses 69.1, 320.1, 325.

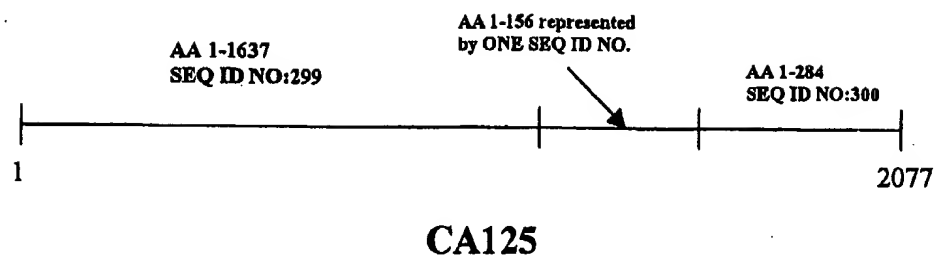
(Upon election of Group I above, Applicant must further elect ONE nucleic acid from those listed in Claim 20, part a, and ONE corresponding encoded polypeptide from those listed in Claim 21, part a, as each sequence represents a separate invention, not a species. Additionally, Claim 26 will only be examined to the extent it reads on the elected sequence(s).)

II. Claims 14-19, 27, 30-33 drawn to ONE purified polypeptide, classified in class 530, subclass 350; class 424, subclass 184.1.

(Upon election of Group II above, Applicant must further elect ONE polypeptide sequence from those listed in Claim 27, part a, as each sequence represents a separate invention, not a species. Claims 14-19 will only be examined to the extent they read on the elected sequence.)

III. Claims 1-12, drawn to ONE CA125 molecule comprising an extracellular domain of SEQ ID NO.: 299, ONE repeat domain, and ONE cytoplasmic domain comprising SEQ ID NO.: 300, classified in class 530, subclass 350.

(Upon election of Group III, Applicant must further elect ONE multiple repeat domain corresponding to ONE linear sequence identifier comprising amino acids 1-156 of domains 1-5. For example, upon election, of Group III, a search and examination of a 2077 AA polypeptide will take place as set forth below:



IV. Claim 13, drawn to a CA125 molecule comprising SEQ ID NO.: 162, classified in class 530, subclass 350.

V. Claims 28-29 drawn to a purified antibody that binds to ONE polypeptide, classified in class 530, subclass 387.1.

(Upon election of Group V above, Applicant must further elect ONE polypeptide sequence from those listed in Claim 28, part a, as each sequence represents a separate invention, not a species.)

VI. Claim 34, drawn to ONE antisense molecule, classified in class 800, subclass 286.

(Upon election of Group VI above, Applicant must further elect ONE nucleic acid from those listed in Claim 20, part a, as each sequence represents a separate invention, not a species.)

Responsive to the Requirement for restriction, Applicant elects to prosecute the invention of group III, with traverse Claims 1-12 drawn to one polypeptide. The applicant elects the repeat domain as shown in SEQ ID NO. 150 for examination.

Applicants respectfully request reconsideration of the Requirement for Restriction, or in the alternative, modification of the Restriction Requirement to allow prosecution of more than one group of Claims designated by the Examiner in the present Application, for the reasons provided as follows.

Under 35 U.S.C § 121 “two or more independent and distinct inventions . . . in one Application may . . . be restricted to one of the inventions.” Inventions are “independent” if “there is no disclosed relationship between the two or more subjects disclosed” (MPEP 802.01).

The term “distinct” means that “two or more subjects as disclosed are related . . . but are capable of separate manufacture, use or sale as claimed, AND ARE PATENTABLE OVER EACH OTHER” (MPEP 802.01) (emphasis in original). However, even with patentably distinct inventions, restriction is not required unless one of the following reasons appear (MPEP 808.02):

1. Separate classification
2. Separate status in the art; or
3. Different field of search.

Further, under patent Office Examining Procedures, “[i]f the Search and Examination of an entire Application can be made without serious burden, the Examiner must examine it on the merits, even though it includes claims to distinct or independent inventions” (MPEP 803, Rev. 8, May 1988) (emphasis added).

The Examiner’s assertions to the contrary notwithstanding, Applicants respectfully submit that conjoint examination and inclusion of all of the Clams of the present Application would not present an undue burden on the Examiner, and accordingly, withdrawal of the Requirement for Restriction.

With respect to the requirement to elect a single species for examination on the merits, Applicants respectfully traverse this requirement for the following reasons:

I. Claim 1(b) providing the multiple repeat domains does not include a genus species relationship

Claim 1(b) relates to a multiple repeat domain. A CA125 molecule can include a variety, if not all of the repeats in a single molecule. SEQ ID NO: 162 which show the recombinant molecule has been marked up as Appendix Tab A, to show the multiple repeats present in a single molecule. Claims to be restricted to different species must be mutually exclusive. The general test as to when claims are restricted respectively to different species is the fact that one claim recites limitations which under the disclosure are found in a first species, but not in a second, while a second claim recites limitations disclosed only from the second species and not the first. MPEP § 12.0[3[c]. As can be seen from an inspection of the recombinant molecule shown in SEQ ID NO: 162, CA125 molecule within the scope of claim 1(b) may have multiple

repeat domains which are not mutually exclusive. Consequently, Applicants respectfully request examination on the multiple repeat domains as claimed. This requirement to elect a single combination of repeats violates the basic right of the Applicants to claim his invention as he chooses. In re Weber, 580 F.2d 455 (USCC 1978).

II. Restriction is not appropriate if the claims are directed to substantially the same molecule

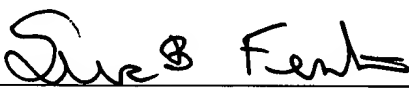
Species are patentably distinct when they are related, but they are capable of separate manufacture and are patentable (novel and nonobvious) over each other. The multiple repeat domains contain multiple repeats wherein each repeat unit has five genomic exons. The variation in repeats set out in Claim 1 (b) are 82% identical and thus present related chemical compounds. The repeat domain is a sequence of 156 amino acids which are repeated multiple times within a discrete portion of the CA125 protein. The repeat domain has its own function and combines with the other domains to provide the overall function of the protein. The designated exons in the repeat domain can vary, but, this variance is minimal. Importantly, when the nucleic acids are expressed they form a CA125 protein. Restriction is not appropriate if claims are directed to the same protein.

In view of the above, withdrawal of the Requirement for the Restriction is requested, and an early action on the merits of the Claims is courteously solicited.

Respectfully Submitted,


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JIM MONTGOMERY

MEMPHIS 171783v1

multiple report domain

164
 A TVPFMVFFTL NFIITNLQYE EDMRHPGSRK
 12101 FNATERELQG ILKPLFRNSS LEYLYSGCRL ASLHPEKDSS AMAVDAICTH
 12151 RPDPEDLGLD RERLYWELSN LTNGIQELGP YTLDRNSLYV NQFTHRSSMP
 12201 TTSTPGTSTV DVGTSCTPSS SPSPTA [REDACTED]
 12251 [REDACTED]
 12301 [REDACTED]
 12351 [REDACTED] TSTPGTSTV DVGTSCTPSS SPSPTA
 12401 LQYGEDMGHP GSRKFNTTER VLOGILGPIF KNTSVGPLYG GCRLTSLRSE
 12451 KDGAATGVDA ICIHHLDPKS PGLNRERLYW ELSQLTNGIK ELGPYTLDNR
 12501 SLYVNCFTHR TSVPTSSPTG TSTVDLGTSG TPFSLPSPAT [REDACTED]
 12551 [REDACTED] EDMRHPGSRK ENTTERVLOT LEGMERNYS VGLYSGCRL
 12601 [REDACTED] REOLNPHSO LTNGIQELGP
 12651 [REDACTED] TSTPGTSTV DVGTSCTPSS SPSPTA
 12701 VPFTLNFTIT NLQYEEDMHG PGSRKFNTTE RVLOGILGPM FKNTSVGLLY
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 13001 [REDACTED] SAGP LLVPFTLNFT ITNLQYEEDM HHPGSRKFNT TERVLOGILG
 13051 PMFKNTSVGL LYSGCRLTLL HPEKNGAATC MDAICSHRLD PKSPGLNREQ
 13101 LYWELSQLTH GIKELGPYTL DRNSLYVNCFT THRSSVAPTS TPGTSTVDLG
 13151 TSGTPSSLPSS PTH [REDACTED] EDMRHPGSRK ENTTERVLOT
 13201 [REDACTED] AATGVDAICTHRLDPKSGV DRGOLNPHSO
 13251 [REDACTED] TSTPGTSTV DVGTSCTPSS SPSPTA
 13301 [REDACTED] GPLLVPFTLN FTITNLQYEE DMHRPGSRKF
 13351 NATERVLOGL LSPIFKNSSV GPLYSGCRLT SLHPEKDGA TGMDAVCLYH
 13401 PNPKRPGLDNR EQLYWELSQL THNITELGPY SLDRDSLYVN GTHONSVPT
 13451 TSTPGTSTVY WATTGTPSSP PGHTPGPLL IPFTFNFTIT NLHYEENMQH

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 14201 TNGIKELGPY TLDNRSLYVN FTTHRSSGLT TSTPWTSTVD LGTSGTPSPV ²⁵⁷ ²⁸⁵
 14251 PSPTTAGPLL VPFTLNFTIT NLQYEEDMHR PGSRKFNATE RVLOGILSPI ¹⁷⁷
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 14401 RTPASLSGPT TASPLLVLFT INCTITNLQY EEDMRRTGSR KFNTMESVLO ²⁸⁹ ¹⁷²
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 14501 NREQLYWELS KLTNDIEELG PYTLDRNSLY VNGFTHQSSV STTSTPGTST ²⁰²
 14551 VDLRTSGTPS SLSSPTIMXX XPLLXPFTLN FTITNLXYEE XMXXPGSRKF ²⁷⁹ ²
 14601 NTERTVLOGL LRPLFKNTSV SSLYSGCRLT LLRPEKDGA TRVDAACTYR ²¹⁰
 14651 PDPKSPGLDR EQLYWELSQL THSTTELGPY TERTVLOGILK PLFKNTSVGP ²²⁹ ²⁷¹
 14701 TSTPGTSTVH LATSGTPSSL PGHTXXXPLL XPFTLNFTIT NLXYEEXMXX ²⁸⁷ ²
 14751 PGSRKFNTE RVLOGILKPL FRNSSLEYLY SGCRLASLRP EKDSSAMAVD ¹⁹⁵
 14801 AICTHRPDPE DLGLDRERLY WELSNLTNGI QELGPYTLD NSLYVNGFTH ²²²
 14851 RSSFLTSTP WTSTVDLGTS GTPSPVPSPT TAGPLLVPFT LNFTITNLQY ²⁵⁹ ²⁸⁵

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 20101 DXXCXXXXDP XXPGLDREX²L YWELSXLTX IXELGPYXLD RXSLYVNG²FT
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 20201 YEEDMHH¹⁸³PGS RKFNTT²ERVL QGI²⁰²LGPMFKN TSVGLLYSGC RLTL²LRPEKN
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 20701 IGPLYSSCRL²¹² TLLR²⁴⁷PEKDKA ATRVDAICTH HPDQSPGLN REQLYWELSO
 20751 LTHGITELGP YTLDRDSL²⁰⁸YV DQ²FTHWSPIP TTST²⁹³PGTSIV NLGTSGIPPS
 20801 LPETT¹⁹⁸XXXPL LXPFTLNFTI TNLYEEXMX XPGSRKFNTT ERVLOGIL²³³LKP
 20851 LFKSTSVG¹⁹⁸PL YSGCRLTL²⁷⁴LR PEKDG²VATRV DAICTHRPDP KIPGLDRQOL
 20901 YWELSQLTHS ITELGPYTLD RDSL²⁹⁴YVNGFT QRSSV¹⁸¹PTTST PGFTTVQPET
 20951 SETPSSLP²²⁰GP TATGPVLLPF TLNFTITNLQ²³² YEEDMHRPGS RKFNTT²⁰⁰ERV
 21001 QGIL²⁸⁹LMPLFKN TSVSSLYSGC RLTL²¹⁵LRPEKD GAATRVDAVC THRPDPKSPG
 21051 LDRERLYWKL²³¹ SOLTHGITEL GPYTLD²⁷⁵RHSL YVNG¹⁹⁰FTHOSS MTTTRTPDTS
 21101 TMHLATSRT²¹⁶P ASLSGPT²²⁵IAS PLLVLTINF TITNLRYEEN MHRPGSRKFN
 21151 TTERVLOGIL²⁹⁵ RPVFKNTSVG²¹¹ PLYSGCRLTL L²²⁰PKKDGAAAT KVDAICTYRP
 21201 DPKSPGLDRE²²⁵ QLYWELSQLT HSITELGPYT QDRDSL²⁵⁵YVNG FTQRSSVPTT
 21251 SV²⁹⁰PGTPTVDL GTSGTPVSKP GPS²¹⁶AASPLL²²⁵V LFTLNGTITN LRYEENMQHP
 21301 GSRKFNTTER VLOGIL²⁹⁰RLSLF KSTSVGPLY²¹¹S GCRLTL²²⁰LRPE KDGTATGVDA
 21351 ICTHHPDPKS²⁵⁵ PRLDREQLYW ELSQLTHNIT ELGHYALDND SLFVNG²⁹⁰FTHR
 21401 SSVSTTST²⁹⁰PG TPTVYLGASK TPASIFGPS¹⁹²A ASHLLILFTL NFTITNLRYE
 21451 ENMWPGSRKF²¹¹ NTTERVLOGL LRPLFKNTSV²²⁰ GPLYSGSRLT LLR²⁵⁴PEKDGEA
 21501 TG²⁵⁴VDAICTHR PDPTGPG¹⁹³LDR EQLYLELSQL THSITELGPY TLD²⁰⁹RDSL²⁴⁸YVN
 21551 G²⁵⁴FTHRSSVPT TS²⁰⁹GVVSEEP FTLNFTINNL RYMADMGQPG SLKF²⁷⁰NITDNV
 21601 MKHIL²⁹⁷SPPLFQ RSSLGARYTG CRVIAL¹⁹⁴FSVK NGAETRVDLL CTYLQPLSGP
 21651 GLPIKQVFHE²²¹ LSQOTHG²⁴⁹ITR LGPYS²⁷⁰LKD²⁹⁷S LYLN¹⁹⁴GYNEPG LDEPPT²²¹PKP
 21701 ATT²⁹⁷ELPPLSE ATT²²¹AMGYHLK TLTLNFTISN LQYSPDMGKG SATFNSTEGV
 21751 LQHL²⁴⁹LRPLFQ KSSMGPFYLG CQLISL²⁹⁸LRPEK DGAATGVDTT CTYHPDPVGP
 21801 GLDIQ²⁹⁸QLYWE LSQ²⁹⁸THGVTQ LGFYVLD²⁹⁸RDS LFING²⁹⁸YAPQN LSIRGEY²⁹⁸IN
 21851 FHIVNWNLSN PDPTSSEY

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